Claims

1.   A method for displaying process information in a process control and/or monitoring system comprising a workstation having a display screen, a controller and an I/O subsystem, said workstation executing the steps of:

5   generating and displaying on the display screen a trend chart containing values of one or more selected process parameters during a selected time window based on a user-defined trend chart configuration; and

generating and displaying on the display screen an event table containing information describing process events that are related to the selected process parameters and that occurred

10   during the selected time window.

2.   The method of claim 1, further comprising a step of:

displaying event markers on the trend chart, the event markers being indicative of events from the event table and the respective times of the events.

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3.   The method of claim 1, wherein the trend chart is a line graph.

4.   The method of claim 1, further comprising a step of:

saving trend chart configuration information in the workstation for later use.

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5.   The method of claim 4, further comprising a step of:

selecting, before the step of generating and displaying the trend chart, information associated with configuration of at least one trend chart saved in the workstation.

25   6.   The method of claim 2, further comprising the steps of:

selecting at least one of the event markers displayed on the trend chart; and

highlighting, on the event table, the event associated with the selected event marker.

7.   The method of claim 2, further comprising the steps of:

30   selecting at least one of the events displayed in the event table; and

highlighting the event marker associated with the event on the trend chart.

8.   The method of claim 2, wherein the step of displaying the event markers includes a step of displaying the event markers as event names.

9.   A process control and/or monitoring system comprising:

a process controller;

an I/O subsystem; and

a workstation having a display screen, said workstation comprising:

        means for generating and displaying on the display screen a trend chart containing values of one or more selected process parameters during a selected time window based on a user-defined trend chart configuration; and

        means for generating and displaying on the display screen an event table containing information describing process events that are related to the selected process parameters and that occurred during the selected time window.

10.   The system of claim 9, further comprising:

        means for generating and displaying event markers on the display screen, the event markers being indicative of events from the event table and the respective times of the events.

11.   The system of claim 9, further comprising:

        means for saving trend chart configuration information for later use.

12.   The system of claim 11, further comprising:

        means for selecting the saved trend chart configuration information for use by the means for generating and displaying the trend chart.

13.   The system of claim 9, further comprising:

        means for highlighting an event marker displayed on the trend chart in response to selection of a process event displayed on the event table and associated with the event marker.

14.   A graphical user interface for displaying trend and event data related to the operation of a process, the interface comprising:

        a first display area configured to display at least one trend line representative of at

least one parameter associated with the process;

a second display area configured to display information representative of at least one process event; and

event markers related to the at least one process event and displayed on the first display area.

15. The graphical user interface of claim 14, wherein the first display area includes more than one trend graph and a separate y-axis scale for each of the more than one trend graphs.

16. The graphical user interface of claim 14, wherein the information representative of the process events includes a time of occurrence of each of the at least one process event.

17. A system for monitoring a process comprising:

an event database containing event records related to the process;

a trend database containing historical trend data related to the process;

means for simultaneously displaying a trend graph representing at least a portion of the historical trend data and a table representing at least a portion of the event records, wherein the table displays event records related to the portion of the historical trend data being displayed on the trend graph.

18. The system of claim 17, further comprising means for selecting which portion of the trend data and the event records are displayed.

19. The system of claim 18, wherein the specified portion is a time interval having a start time and an end time.

20. The system of claim 17, further comprising:

means for displaying, on the trend graph, event markers that are related to the event records.

21. The system of claim 17, further comprising:

a run time database containing current trend data; and

means for displaying the current trend data on the trend graph.

22.   The system of claim 17, further comprising:

means for configuring the trend graph; and

a chart file containing trend graph configuration information and filter settings from previously developed trend graphs, the chart file being used by the means to configure the trend graph to configure the trend graph.

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